

ABSTRACT

A photo amplifying apparatus for
amplifying wavelength division multiplexed signals
includes a specific wavelength measuring unit for
5 measuring a specific wavelength at a measuring point,
a total power measuring unit for measuring all
wavelengths at the measuring point, and an output
control unit for controlling the output of the photo
amplifying apparatus based on the light power
10 measured by the specific wavelength measuring unit
and the total power measuring unit. Since the photo
amplifying apparatus measures both the specific
wavelength and all wavelengths, the photo amplifying
apparatus can determine change in the number of
15 multiplexed wavelengths and the gain gradient of the
photo signals, and can properly control its output
level.